REMARKS

[0001] Applicant respectfully requests reconsideration and allowance of all of the claims of the application. Claims 1-36 are presently pending. Claims amended herein are 1, 10, 19, 28, and 31. No claims are added, withdrawn, or cancelled herein.

Formal Request for an Interview

[0002] If the Examiner's reply to this communication is anything other than allowance of all pending claims and the only issues that remain are minor or formal matters, then I formally request an interview with the Examiner. I encourage the Examiner to call me—the undersigned representative for the Applicant—so that we can talk about this matter so as to resolve any outstanding issues quickly and efficiently over the phone.

[0003] Please contact me to schedule a date and time for a telephone interview that is most convenient for both of us. While email works great for me, I welcome your call as well. My contact information may be found on the last page of this response.

Claim Amendments

[0004] Without conceding the propriety of the rejections herein and in the interest of expediting prosecution, Applicant amends claims 1, 10, 19, 28, and 31 herein. Applicant amends claims to clarify claimed features. Such amendments are made to expedite prosecution and more quickly identify allowable subject matter. Such amendments are merely intended to clarify the claimed features,

and should not be construed as further limiting the claimed invention in response
to the cited references.

Formal Matters

[0005]   This section addresses any formal matters (e.g., objections) raised by the Examiner.

Claims

[0006]   The Examiner objects to claims 31 for being in improper dependent form.   Herein, Applicant amends these claims, as shown above, to address the objection made by the Examiner, and to expedite prosecution.

Substantive Matters

Claim Rejections under § 101

[0007]   Claims 1-9 are rejected under 35 U.S.C. § 101.   Applicant respectfully traverses this rejection. Applicant herein submits that the claims of the instant Application are to be construed—now and in the future--to be limited to subject matter deemed patentable in accordance with United States Federal statutes, namely section 101 of Title 35 U.S.C., and as interpreted by appropriate and authoritative Article III entities. In light of this disclaimer, Applicant asserts that these claims are allowable. Accordingly, Applicant asks the Examiner to withdraw these rejections.

[0008]   If the Examiner maintains the rejection of these claims, as amended, then Applicant requests additional guidance as to what is necessary to overcome the rejection.

Claim Rejections under § 103

[0009]   The Examiner rejects claims 1-36 under § 103. For the reasons set forth below, the Examiner has not made a prima facie case showing that the rejected claims are obvious. Accordingly, Applicant respectfully requests that the § 103 rejections be withdrawn and the case be passed along to issuance.

[0010]   The Examiner's rejections are based upon the following references in various combinations:

- **Zhang:** *Zhang, et al.,* US Patent Application Publication No. 2003/0058931 (published March 27, 2003);

- **Radha:** *Radha, et al.,* US Patent Application Publication No. 2003/0002579 (published January 2, 2003); and

- **Haskell:** *Haskell, et al.,* US Patent No. 5,742,343 (issued April 21, 1998).

Overview of the Application

[0011] The Application describes that:

Systems and methods for enhancement layer transcoding of fine-granular scalable video bitstreams are described. In one aspect, an enhancement layer bitstream is decoded from encoded video data. The encoded video data includes a base layer and one or more enhancement layers. The encoded video data is encoded according to a high HQRB (high quality reference bit-rate). Data throughput characteristics of a network coupled to a client computing device are determined. A new HQRB is calculated based on the data throughput characteristics. The decoded enhancement layer bitstream is then encoded based on the new HQRB to generate a transcoded enhancement layer for streaming to the client computing device. The base layer is not decoded for streaming to the client computing device (see the Abstract).

Cited References

[0012] The Examiner cites Zhang as the primary reference in the obviousness-based rejections. The Examiner cites Radha and Haskell as secondary references in the obviousness-based rejections.

Zhang

[0013] Zhang describes that:

The invention provides a method for coding an output bitstream of an input video so the decoded output bitstream has a constant perceived quality. A base layer bitstream having a constant bit-rate is generated from the input video, and an input enhancement layer bitstream is generated from a difference between the input video and the base layer bitstream. Alternatively, the base and input enhancements layer bitstreams are pre-stored. Rate and distortion characteristics are extracted from the base layer bitstream and the input enhancement layer bitstream, and an output enhancement layer bitstream having a variable bit-rate is generated from the input enhancement layer bitstream according to the rate and distortion characteristics. The base layer bitstream and the output enhancement layer bitstream, in combination, form an output bitstream having a variable bit-rate and a constant distortion (see the Abstract).

Radha

[0014]   Radha describes:

A system for coding video data comprised of one or more frames codes a portion of the video data using a frame-prediction coding technique, and generates residual images based on the video data and the coded video data. The system then codes the residual images using a fine-granular scalability coding technique, and outputs the coded video data and at least one of the coded residual images to a receiver (see the Abstract).

Haskell

[0015]   Haskell describes:

High-resolution, progressive format video signals having high frame rates may be encoded by a base layer encoder and an enhancement layer encoder to provide two kinds of encoded video signals which share a common output channel. These encoded video signals are received at an input of a video receiver which may use one or both of the two kinds of encoded video signal. Relatively lower

performance high-definition televisions may thus receive video signals from higher performance transmitters and produce satisfactory pictures. Higher performance HDTVs will be able to utilize the full performance capabilities of these video signals (see the Abstract).

Obviousness Rejections

Lack of *Prima Facie* Case of Obviousness (MPEP § 2142)

[0016]   Applicant disagrees with the Examiner's obviousness rejections. Arguments presented herein point to various aspects of the record to demonstrate that all of the criteria set forth for making a prima facie case have not been met.

Based upon Zhang

[0017]   The Examiner rejects claims 1-36 under 35 U.S.C. § 103(a) as being unpatentable over various combinations of Zhang, Radha, and Haskell. Applicant respectfully traverses the rejection of these claims and asks the Examiner to withdraw the rejection of these claims.

Independent Claim 1

[0018]   Applicant submits that the various combinations of Zhang, Radha, and Haskell do not teach or suggest at least the following features as recited in this claim (with emphasis added):

> ***Decoding an enhancement layer bitstream using*** the content distribution server and ***an encoded base layer bitstream*** from a bitstream of encoded video data ***as the base layer is encoded***, the encoded video data including the encoded base layer and one or more encoded enhancement layers, the video data having been encoded according to a high HQRB (high quality reference bit-rate) that determines how many bits of the enhancement layer bitstream

are used to reconstruct a high quality reference image (emphasis added).

[0019] The Examiner indicates in pertinent part (Action, p. 4) the following with regard to this claim:

9. Claims 1-5, 7-14, 16-23, 25-32, and 34-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent Application Publication 2003/0058931 A1 (Zhang et al.) in view of US Patent Application Publication 2003/0002579 A1 (Radha et al.). Zhang et al. teaches a method of transcoding scalable video comprising a base layer and enhancement layer. Regarding independent claim 1, figure 5 of Zhang et al. illustrates the transcoder system. An FGS encoder 510 encodes input video 501 to a base layer video 511 and an input enhancement layer video 512. (paragraph 0048) In transcoding, enhancement layer 512 is transcoded in transcoder 540 to output enhancement layer video 519, without transcoding base layer 511 (paragraph 0050). The

[0020] However, Zhang describes:

The FGS encoder 510 generates the base layer bitstream 511 and an input enhancement layer bitstream 512. The base layer bitstream 511 has a predetermined minimum bit-rate and corresponding distortion. The input enhancement layer bitstream 512 is generated from a difference between the input video 501 and the base layer bitstream 511 using bit-plane encoding, **_with partial or full decoding of the base layer bitstream 511_**...

[0050] The enhancement layer VBR transcoder 540 generates an output enhancement layer bitstream 519 from the input enhancement layer bitstream 512 according to the rate and distortion characteristics 521 using a sliding window 541 and available network bandwidth 542. As described below, the size (M) of the window 541 can be fixed or adapted to the video complexity

and network conditions (emphasis added, see paragraphs 0048-0050).

[0021]   Thus, Zhang at least partially decodes the Zhang base layer bitstream. In contrast, Claim 1 recites ***decoding an enhancement layer bitstream using*** the content distribution server and ***an encoded base layer bitstream*** from a bitstream of encoded video data ***as the base layer is encoded***. Moreover, Applicant respectfully submits that neither Radha nor Haskell cure these deficiencies of Zhang.

[0022]   As shown above, **Zhang, Radha, and Haskell** alone, or in combination, do not teach or suggest all of the elements and features of this claim. Accordingly, Applicant asks the Examiner to withdraw the rejection of this claim.

Dependent Claims 2-9

[0023]   These claims ultimately depend upon independent claim 1.   As discussed above, claim 1 is allowable.   It is axiomatic that any dependent claim which depends from an allowable base claim is also allowable.   Additionally, some or all of these claims may also be allowable for additional independent reasons.

Claims 10-36

[0024]   Applicant respectfully submits that the reasoning applied above to claim 1 applies equally well here.   Accordingly, Applicant requests that the rejection of these claims be withdrawn.

[0025]

Dependent Claims

[0026]   In addition to its own merits, each dependent claim is allowable for the same reasons that its base claim is allowable.   Applicant requests that the Examiner withdraw the rejection of each dependent claim where its base claim is allowable.

Conclusion

[0027] All pending claims are in condition for allowance. Applicant respectfully requests reconsideration and prompt issuance of the application. If any issues remain that prevent issuance of this application, the **Examiner is urged to contact me before issuing a subsequent Action**. Please call or email me at your convenience.

Respectfully Submitted,

Lee & Hayes, PLLC
Representatives for Applicant

  /Robert L. Villhard/   Dated: April 21, 2009
Rob C. Peck (robp@leehayes.com; 206-876-6019)
Registration No. 56,826
Robert L. Villhard (bob@leehayes.com)
Registration No. 53725
Customer No. **22801**

Telephone: (512) 505-8162
Facsimile: (509) 323-8979
www.leehayes.com